CUMULATIVE INDEXES

CONTRIBUTING AUTHORS, VOLUMES 32-36

A

Albrecht, A. C., 33:353–76 Alder, B. J., 32:311–29 Altkom, R., 35:265–89 Anderson, C. F., 33:191–222 Angell, C. A., 34:593–630 Avouris, P., 35:49–73

B

Ballard, S. G., 33:377-407 Barllett, R. J., 32:2359-401 Baumgärtner, A., 35:419-35 Ben-Shaul, A., 36:179-211 Bersohn, R., 33:409-42 Bondybey, V. E., 35:591-612 Borejdo, J. 33:319-51 Boxer, S. G., 34:389-417 Brauman, J. I., 34:187-215 Brochard, F., 32:433-51 Bunker, P. R., 34:59-75 Burch, R. R., 33:89-118

0

Calef, D. F., 34:493–524
Callis, P. R., 34:329–57
Campion, A., 36:549–72
Cardillo, M. J., 32:331–57
Case, D. A., 33:151–71
Champion, P. M., 33:353–76
Chidsey, C. E. D., 34:389–417
Christiansen, P. A., 36:407–32
Clouthier, D. J., 34:31–58
Cohen, M. L., 35:537–62
Cooke, R., 33:319–51
Crim, F. F., 35:657–91

D

Dacol, D., 34:419–61 Das, P., 35:507–36 Debrunner, P. G., 33:283–99 de Gennes, P. G., 33:49–61 Demuth, J., 35:49–73 Deutch, J. M., 34:493–524 Djeu, N., 34:557–91 Drickamer, H. G., 33:25–47 Drobny, G. P., 36:451–89 Duncan, J. L., 34:245–72 Dunning, F. B., 33:173–89 Durup, J., 32:53–76 Dykstra, C. E., 32:25–52

F

Eichinger, B. E., 34:359–87 Elson, E. T., 36:379–406 Enderby, J. E., 34:155–85 Ermler, W. C., 36:407–32 Etemad, S., 33:443–69 Ezra, G. S., 36:277–320

F

Fayer, M. D., 33:63–87 Fendler, J. H., 35:137–57 Fogarasi, G., 35:191–213 Frauenfelder, H., 33:283–99 Freeman, G. R., 34:463–92 Frei, H., 36:491–524 Friedman, H. L., 32:179–204 Friedman, J. M., 33:471–91 Frisch, H. L., 32:433–51

C

Garrett, B. C., 35:159–89 Gelbart, W. M., 36:179–211 Glaeser, R. M., 36:243–75 Golden, D. M., 33:493–532 Green, S., 32:103–38 Greene, C. H., 33:119–50 Greer, S. C., 32:233–65 Grant, E. R., 36:277–320 Griffiths, J. F., 36:77–104 Gudeman, C. S., 35:387–418

H

Harris, S. J., 36:31–52 Heeger, A. J., 33:443–69 Heller, E. J., 35:563–89 Herzberg, G., 36:1–30 Hildebrand, J. H., 32:1–23 Hirota, E., 36:53–76 Hirschfelder, J. O., 34:xi–xvi; 1–29 Hoover, W. G., 34:103–27 Hyde, J. S., 31:293–317 Hynes, J. T., 36:573–97

I

Johnson, P. M., 32:139-57 Johnston, H. S., 35:484-505

ĸ

Kawaguchi, K., 36:53–76 Klein, M. L., 36:525–48 Koszykowski, M. L., 32:267–309 Kramer, M., 34:419–61 Krauss, M., 35:357–85

L

Lèger, L., 33:49–61 Legon, A. C., 34:275–300 Leone, S. R., 35:109–35 Lin, M. C., 34:557–91 Lowe, M. A., 36:213–41 Louie, S. G., 35:537–62

N.E

MacDiarmid, A. G., 33:443-69 Madey, T. E., 35:215-40 Mandel, M., 35:75-108 Marcus, R. A., 32:267-309 Mauzerall, D., 33:377-407 Mayer, J. E., 33:1-23 McMillen, D. F., 33:493-532 Mendelson, R. A., 33:319-51 Metiu, H., 35:507-36 Miller, T. A., 33:257-82 Milligan, R. F., 36:139-58 Moldover, M. R., 32:233-65 Moore, C. B., 34:525-55 Morales, M. F., 33:319-51 Moseley, J., 32:53-76 Moylan, C. R., 34:187-215 Muetterties, E. L., 33:89-118

N

Newton, M. D., 35:437-80 Noid, D. W., 32:267-309

0

Odijk, T., 35:75-108 Ondrias, M. R., 33:471-91

- Opella, S. J., 33:533–62 Osgood, R. M. Jr., 34:77– 101 Otis, C. E., 32:139–57 Oxtoby, D. W., 32:77–101
- Parr, R. G., 34:631–56 Pechukas, P., 32:159–77 Pimentel, G. C., 491–524 Pitzer, K. S., 36:407–32 Pollock, E. L., 32:311–29 Pope, M., 35:613–55 Porschke, D., 36:159–78 Pratt, L. R., 36:433–49

Pulay, P., 35:191-213

Rabitz, H., 34:419–61 Ramaker, D. E., 35:215–40 Ramsay, D. A., 34:31–58 Record, M. T. Jr., 33:191– 222 Reid, B. R., 36:105–37 Reinhardt, W. P., 33:223–55 Robiette, A. G., 34:245–72 Roelofs, M. G., 34:389–417 Rossky, P. J., 36:321–46 Rousseau, D. L., 33:471–91

- S
 Saykally, R. J., 32:403–31;
 35:387–418
 Schneider, F. W., 36:347–78
 Shapiro, M., 33:409–42
 Smalley, R. E., 34:129–53
 Spaepen, F., 35:241–63
 Stebbings, R. F., 33:173–89
 Stechel, E. B., 35:563–89
- Snapiro, M., 23:409-42
 Smalley, R. E., 34:129-53
 Spaepen, F., 35:241-63
 Stebbings, R. F., 33:173-89
 Stephens, P. J., 36:213-41
 Stevens, W. J., 35:357-85
 Stockbauer, R., 35:215-40
 Stockmayer, W. H., 35:1-21
 Stolzenberg, A. M., 33:89118
 Strauss, H. L., 34:301-28
 Sutin, N., 35:437-80
- Takashi, R., 33:319–51 Thomas, G. A., 36:139–58 Tinoco, I. Jr., 35:329–55 Truhlar, D. G., 35:150–89 Turnbull, D., 35:241–63

Swenberg, C. E., 35:613-55

U Umstead, M. E., 34:557-91

- V
- Van Zee, R. J., 35:291-327
- W
- Weinberg, W. H., 34:217–43 Weiner, A. M., 36:31–52 Weisshaar, J. C., 34:525–55 Weissman, M. B., 32:205–
- 32 Weltner, W. Jr., 35:291–327 Wemmer, D. E., 36:105–37 Whetten, R. L., 36:277–320 Williams, A. L., 35:329–55 Williams, C., 32:403–51 Woods, R. C., 32:403–31
- Y
- Yamakawa, H., 35:23-47
- Z
- Zare, R. N., 33:119-50; 35:265-89 Zimm, B. H., 35:1-21

CHAPTER TITLES, VOLUMES 32-36

BIOPHYSICAL CHEMISTRY Polyelectrolyte Theories and Their		
Applications to DNA	C. F. Anderson, M. T. Record, Jr.	22.101.222
Dynamics of Proteins	P. G. Debrunner, H. Frauenfelder	33:191–222 33:283–99
Some Physical Studies of the Contractile Mechanism in Muscle	M E Manda I Davida I Dav	
Mechanism in Muscie	M. F. Morales, J. Borejdo, J. Botts, R. Cooke, R. A. Mendelson, R.	22.210.51
Time-Resolved Resonance Raman Studies of	Takashi	33:319-51
Hemoglobin	J. M. Friedman, D. L. Rousseau,	
riemogioom	M. R. Ondrias	33:471-91
Solid State NMR of Biological Systems Electronic States and Luminescence of Nucleic	S. J. Opella	33:533-62
Acid Systems	P. R. Callis	34:329-57
Magnetic Field Effects on Reaction Yields in		
the Solid State: An Example From		
Photosynthetic Reaction Centers	S. G. Boxer, C. E. D. Chidsey, M.	
	G. Roelofs	34:389-417
Interactions and Kinetics in Membrane		
Mimetic Systems	J. H. Fendler	35:137-57
Differential Absorption and Differential Scattering of Circularly Polarized Light:		
Applications to Biological Macromolecules High Resolution NMR Studies of Nucleic	I.Tinoco, Jr., A. L. Williams, Jr.	35:329–55
Acids and Proteins	D. E. Wemmer, B. R. Reid	36:105-37
Effects of Electric Fields on Biopolymers	D. Porschke	36:159-78
Electron Crystallography of Biological		
Macromolecules	R. M. Glaeser	36:243-75
Fluorescence Correlation and Photobleaching		
Recovery	E. L. Elson	36:379-406
CHEMICAL KINETICS—GAS PHASE		
Transition State Theory	P. Pechukas	22.150.77
Collisions of Rydberg Atoms with Molecules	F. B. Dunning, R. F. Stebbings	32:159-77 33:173-89
Sensitivity Analysis in Chemical Kinetics	H. Rabitz, M. Kramer, D. Dacol	34:419-61
Variational Transition State Theory	D. G. Truhlar	35:159-89
Selective Excitation Studies of Unimolecular	D. G. Human	33.137-07
Reaction Dynamics	F. F. Crim	35:657-91
Chemical Kinetics of Soot Particle Growth	S. J. Harris, A. M. Weiner	36:31-52
Thermokinetic Interactions in Simple Gaseous	0.01.100100,711.101	50.51 52
Reactions	J. F. Griffiths	36:77-104
CHEMICAL KINETICS—PHOTOCHEMISTRY AN	D RADIATION CHEMISTRY	
I. Electrons in Fluids II. Nonhomogeneous		
Kinetics	G. R. Freeman	34:463-92
Formaldehyde Photochemistry	C. B. Moore, J. C. Weisshaar	34:525-55
Infrared Induced Photochemical Processes in		
Matrices	H. Frei, G. C. Pimentel	36:491-524
CHEMICAL KINETICS—REACTION DYNAMICS		
Fast Ion Beam Photofragment Spectroscopy	J. Moseley, J. Durup	32:53-76
Quasiperiodic and Stochastic Behavior in	J. Moseley, J. Durup	34.33-10
Molecules	D. W. Noid, M. L. Koszykowski,	
and the same of th	R. A. Marcus	32:267-309

632 CHAPTER TITLES

Photofragment Alignment and Orientation	C. H. Greene, R. N. Zare	33:119-50
Theories of the Dynamics of Photodissociation	M. Shapiro, R. Bersohn	33:409-42
Nonequilibrium Molecular Dynamics	W. G. Hoover	34:103-27
Dynamics of Electronically Excited States	R. E. Smalley	34:129-53
State-Resolved Molecular Reaction Dynamics	S. R. Leone	35:109-35
CHEMICAL KINETICS—SOLUTIONS (CONDENS		
Diffusion-Controlled Reactions	D. F. Calef, J. M. Deutch	34:493-524
Electron Transfer Reactions in Condensed		
Phases	M.D. Newton, N. Sutin	35:437-80
Periodic Perturbations of Chemical Oscillators:	E W C I - II	24 248 80
Experiments	F. W. Schneider	36:347-78
Chemical Reaction Dynamics in Solution	J. T. Hynes	36:573-97
ELECTROCHEMISTRY		
Ionization in Solution by Photoactivated		
Electron Transfer	D. Mauzerall, S. G. Ballard	33:377-407
GEOCHEMISTRY AND COSMOCHEMISTRY		
Interstellar Chemistry: Exotic Molecules in		
Space	S. Green	32:103-38
Human Effects on the Global Atmosphere	H. S. Johnston	35:481-505
LASER CHEMISTRY, ENERGY TRANSFER AND	RELAXATION	
Molecular Multiphoton Spectroscopy with	B. W. 1.1	22 120 45
Ionization Detection	P. M. Johnson, C. E. Otis	32:139-57
Dynamics of Molecules in Condensed Phases:		
Picosecond Holographic Grating	и в г	22.42.07
Experiments Chemical Lasers	M. D. Fayer M. C. Lin, M. E. Umstead,	33:63-87
Chemical Lasers	N. Dieu	34:557-91
Relaxation and Vibrational Energy	N. Djeu	34.337-71
Redistribution Processes in Polyatomic		
Molecules	V. E. Bondybey	35:591-612
LIQUID STATE—SIMPLE FLUIDS		
Renormalized Kinetic Theory of Dense Fluids	S. Yip	30:547-77
LIQUID STATE—SOLUTIONS OF ELECTROLY	TES: FUSED SALTS	
Conduction in Fused Salts and Salt-Metal		
Solutions	N. H. Nachtrieb	31:131-56
Electrolyte Solutions at Equilibrium	H. L. Friedman	32:179-204
Neutron Scattering from Ionic Solutions Dielectric Properties of Polyelectrolyte	J. E. Enderby	34:155-85
Solutions Solutions	M. Mandel, T. Odijk	35:75-108
Solutions	N. Mandel, I. Odljk	33.73-108
LIQUID STATE—STRUCTURE		
Simulation of Polar and Polarizable Fluids	B. J. Alder, E. L. Pollock	32:311-29
Supercooled Water	C. A. Angell	34:593-630
The Structure of Polar Molecular Liquids	P. J. Rossky	36:321-46
Theory of Hydrophobic Effects	L. R. Pratt	36:433-49
MAGNETIC RESONANCE (ELECTRON SPIN, N	NUCLEAR, QUADRUPOLE)	
Recent Developments in Electron		
Paramagnetic Resonance: Transient Method		33:301-18
Multiple Quantum NMR: Studies of Molecules		24 161 00
in Ordered Phases	G. P. Drobny	36:451-89
MISCELLANEOUS		
Laser Microchemistry and Its Application to		
Electron-Device Fabrication	R. M. Osgood, Jr.	34:77-101
Metallic Glasses	F. Spaepen, D. Turnbull	35:241-63
Relativistic Effects in Chemical Systems	P. A. Christiansen, W. C. Ermler,	33.241-03
trenditions Effects in Chemical Systems	K. E. Pitzer	
	L. D. THESI	

MOLECULAR STRUCTURE		
High Resolution Spectroscopy of Molecular		
Ions	R. J. Saykally, R. Claude Woods	32:403-31
Light and Radical Ions	T. A. Miller	33:257-82
Transition Metal Molecules	W.Weltner, Jr., R. J. Van Zee	35:291–327
PHYSICAL ORGANIC		
Gas Phase Acid-Base Chemistry	C. R. Moylan, J. I. Brauman	34:187-215
	C. at. Moyeum, S. I. Diaminus	54.107-215
PHYSICAL PHENOMENA—MISCELLANEOUS		
Fluctuation Spectroscopy Thermodynamic Anomalies at Critical Points	M. B. Weissman	32:205–32
of Fluids	S. C. Greer, M. R. Moldover	32:233-65
Vibrational Circular Dichroism	P. J. Stephens, M. A. Lowe	36:213-41
Violational Citedian Dieniology	1. J. Stephens, M. A. Lowe	50.215-41
POLYMERS AND MACROMOLECULES		
Dynamics of Entangled Polymer Chains Polyacetylene, (CH) _x : The Prototype	P. G. de Gennes, L. Lèger	33:49-61
Conducting Polymer	S. Etemad, A. J. Heeger, A. G.	
	MacDiarmid	33:443-69
The Theory of High Elasticity	B. E. Eichinger	34:359-87
Stiff-Chain Macromolecules	H. Yamakawa	35:23-47
Simulation of Polymer Motion	A. Baumgärtner	35:419-35
Theory of Chain Packing in Amphiphilic		
Aggregates	A. Ben-Shaul, W. M. Gelbart	36:179-211
PREFATORY CHAPTERS		
A History of Solution Theory	J. H. Hildebrand	32:1-23
The Way It Was	J. E. Mayer	33:1-23
My Adventures in Theoretical Chemistry	J. O. Hirschfelder	34:1-29
When Polymer Science Looked Easy	W. H. Stockmayer, B. H. Zimm	35:1-21
Molecular Spectroscopy: A Personal History	G. Herzberg	36:1-30
QUANTUM CHEMISTRY		
Potential Energy Barriers in Unimolecular		
Rearrangements	C. E. Dykstra	32:25-52
Many-Body Perturbation Theory and Coupled		
Cluster Theory for Electron Correlation in		
Molecules	R. J. Bartlett	32:359-401
Electronic Structure Calculations Using the Xα Method	D. A. Case	33:151-71
Complex Coordinates in the Theory of Atomic	D. A. Case	33.131-71
and Molecular Structure and Dynamics	W. P. Reinhardt	33:223-55
Quasilinear and Quasiplanar Molecules	P. R. Bunker	34:59-75
Density Functional Theory	R. G. Parr	34:631-56
Ab Initio Vibrational Force Fields	G. Fogarasi, P. Pulay	35:191-213
Effective Potentials in Molecular Quantum		
Chemistry	M. Krauss, W. J. Stevens	35:357-85
Molecular Dynamics Beyond the Adiabatic Approximation: New Experiments and		
Theory	R. L. Whetten, G. S. Ezra, E. R.	
	Grant	36:277-320
QUANTUM MECHANICS		
Quantum Ergodicity and Spectral Chaos	E. B. Stechel, E. J. Heller	35:563-89
SCATTERING PHENOMENA—DYNAMICAL		
Light Scattering Studies of Molecular Liquids	D. Kivelson, P. A. Madden	31:523–58
SCATTERING PHENOMENA—STRUCTURAL		
Developments in Extended X-Ray Absorption		
Fine Structure Applied to Chemical Systems	D. R. Sandstrom, F. W. Lytle	30:215–38

634 CHAPTER TITLES

SOLIDS AND ORDERED ARRAYS—STRUCTURE Electronic Processes in Organic Solids The Metal-Insulator Transition	M. Pope, C. E. Swenberg R. F. Milligan, G. A. Thomas	35:613-55 36:139-58
Computer Simulation Studies of Solids	M. L. Klein	36:525-48
SPECTROSCOPY—ELECTRONIC AND PHOTOEL	ECTRONIC	
High Pressure Studies of Molecular Luminescence	H. G. Drickamer	33:25-47
The Spectroscopy of Formaldehyde and	H. G. Drickamer	33:23-41
Thioformaldehyde Effects of Saturation on Laser-Induced	D. J. Clouthier, D. A. Ramsay	34:31-58
Fluorescence Measurements of Population		
and Polarization	R. Altkorn, R. N. Zare	35:265-89
SPECTROSCOPY—INFRARED AND RAMAN		
Resonance Raman Scattering: The Multimode		
Problem and Transform Methods High Resolution Vibration-Rotation	P. M. Champion, A. C. Albrecht	33:353–76
Spectroscopy	A. G. Robiette, J. L. Duncan	34:245-72
Pseudorotation: A Large Amplitude Molecular Motion	II I Strauge	24.201 20
Velocity Modulation Infrared Laser	H. L. Strauss	34:301-28
Spectroscopy of Molecular Ions The Electromagnetic Theory of Surface	C. S. Gudeman, R. J. Saykally	35:387-418
Enhanced Spectroscopy	H. Metiu, P. Das	35:507-36
High Resolution Infrared Studies of Molecular Dynamics	E. Hirota, K. Kawaguchi	36:53–76
Raman Spectroscopy of Molecules Adsorbed on Solid Surfaces	A. Campion	36:549-72
SPECTROSCOPY—MICROWAVE		
Pulsed-Nozzle, Fourier-Transform Microwave		
Spectroscopy of Weakly Bound Dimers	A. C. Legon	34:275-300
STATISTICAL MECHANICS		
Vibrational Relaxation in Liquids	D. W. Oxtoby	32:77-101
Simulation of Polar and Polarizable Fluids	B. J. Alder, E. L. Pollock	32:311-29
Polymer Collapse	C. Williams, F. Brochard, H. L. Frisch	32:433-51
	1113611	32.433-31
SURFACES—ADSORPTION AND CATALYSIS		
Kinetic Processes on Metal Single-Crystal		
Surfaces	R. J. Madix, J. Benziger	29:285-306
SURFACES—STRUCTURE AND DYNAMICS Gas-Surface Interactions Studied with		
Molecular Beam Techniques	M. J. Cardillo	32:331-57
Molecular Features of Metal Cluster Reactions	E. L. Muetterties, R. R. Burch, A.	
	M. Stolzenberg	33:89-118
Order-Disorder Phase Transitions in	W W Waisham	24.217 42
Chemisorbed Overlayers Electron Energy Loss Spectroscopy in the	W. H. Weinberg	34:217–43
Study of Surfaces	P. Avouris, J. Demuth	35:265-89
Characterization of Surfaces Through Electron		
and Photon Stimulated Desorption	T. E. Madey, D. E. Ramaker,	
Flatonia Parantina of Conferen	R.Stockbauer M. L. Cohen, S. G. Louie	35:215-40
Electronic Properties of Surfaces	M. L. Conen, S. G. Louie	35:537–62
THERMOCHEMISTRY AND THERMODYNAMIC	CS	
Hydrocarbon Bond Dissociation Energies	D. F. McMillen, D. M. Golden	33:493-532

